

Why does my child's math homework look different?



Today's students are learning math differently than their parents did.

Students today are being challenged to do more than memorize math formulas, thanks to the Montana Common Core Math Standards. Our new standards encourage students to become critical thinkers and problem solvers. By emphasizing students' ability to explain their answers, they are being challenged to develop a deeper understanding of math. A strong foundation in math will better equip students to tackle new math problems they encounter throughout their education, work, and life.

Students are being asked to learn the same skills that you did, but are also being asked to show their thinking in words, pictures, and/or numbers, allowing students to better communicate their understanding of concepts. Instead of coming home with a worksheet full of problems, your child may have an assignment that only asks them to answer one or two problems or to solve one problem multiple ways.

Additionally, instead of rushing through many concepts in a short amount of time, your child's teacher will focus on making sure students have a strong understanding of each concept before moving on to the next. For example, students will need to develop and demonstrate a strong understanding of multiplication and division before moving on to fractions.

Your child will also bring home math problems that relate to real life and allow them to picture situations in their mind. Using real-world examples to teach fractions, division, multiplication—among other math skills—will provide students with a greater understanding of what they are learning. They will also have the opportunity to engage in conversations with each other about their learning with guidance from their teacher. These active learning opportunities help students become more comfortable performing math.

The goal of today's math education is to help your child develop a lifelong understanding of math that they can use as adults, at home and in the workplace.

"The Montana Common Core Math Standards have allowed me to focus deeply on specific concepts in fourth grade.

My students still learn how to multiply and divide whole numbers just like many parents learned in fourth grade. What's different about how my students are learning this skill is that I have the time to present many different strategies and models so students gain an understanding rather than memorizing steps to procedures. Many of us, me included, may have been taught riddles or songs to help us remember steps for long division. My students no longer need these sorts of remembering strategies because I am able to build a solid foundation of concepts and skills. My students create, discuss, model, and think about mathematics rather than copy, memorize, and recite. My students are mathematicians. I know it, but more importantly, THEY know it."



Melissa Romano-Lehman, 2012 Presidential Award for Excellence in Mathematics, 4th grade teacher, Helena



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What can I do to support my child who is struggling with math homework?



If your child seems to be struggling with math, there are many things a parent can do to help. First, it's okay to tell your child that you didn't learn a skill in the same way. This actually helps reinforce the idea to your child that there are many ways to do things, especially in math, and multiple ways can be right.

Then, start with your child's classroom teacher and ask if he/she has any information about the concept being taught. Teachers want to work with parents, and this is a great opportunity to work together to ensure your child succeeds. Additionally, you can check out websites to get more information about what your child is learning.

Here are some helpful websites that explain math strategies and concepts so parents can support their children throughout their education.

Illustrative Mathematics

www.illustrativemathematics.org

Eureka Math Tip Sheets and Video Clips

<http://commoncore.org/parents>

Khan Academy

<https://www.khanacademy.org/commoncore>

The Teaching Channel

www.theteachingchannel.org

Council of the Great City Schools, Parent Roadmaps - Mathematics

<http://www.cgcs.org/Page/244>

HomeworkMT: <http://www.homeworkmt.org/>

HomeworkMT offers free online tutoring, academic resources, writing assistance and preparatory testing materials from Tutor.com for all Montana residents. Get help in math from a live tutor as part of this statewide service. The service can be accessed from a Montana public school, academic or special library or from your home computer.

The National Council of Teachers of Mathematics suggests asking the following kinds of questions to help you and your child tackle the challenges of math homework:

- Are there instructions or directions? What do they say?
- Are there words in the directions or the problem that you do not understand?
- Where do you think you should begin?
- Is there anything that you already know that can help you work through the problem?
- What have you done so far?
- Do you have other problems like this one? Can we look at one of those together?
- Can you draw a picture or make a diagram to show how you solved a problem like this one?
- Can you tell me where you are stuck?
- Is there someone you can call to get help? Can you discuss the problem with a classmate?
- Would using a calculator help you solve the problem?
- Would it help to go on to another problem and come back to this one later?
- Why don't we look for some help online?



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